

What Is Claimed Is:

1. An isolated polynucleotide comprising a member selected from the group consisting of:
 - (a) a polynucleotide having at least a 70% identity to a polynucleotide encoding an enzyme comprising amino acid sequences set forth in SEQ ID NOS:33-42;
 - (b) a polynucleotide which is complementary to the polynucleotide of (a);and
 - (c) a polynucleotide comprising at least 15 consecutive bases of the polynucleotide of (a) or (b).
2. The polynucleotide of Claim 1 wherein the polynucleotide is DNA.
3. The polynucleotide of Claim 1 wherein the polynucleotide is RNA.
4. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 414 of SEQ ID NO:33.
5. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 373 of SEQ ID NO:34.
6. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 453 of SEQ ID NO:35.
7. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 343 of SEQ ID NO:36.
8. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 398 of SEQ ID NO:37.

9. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 592 of SEQ ID NO:38.

10. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 354 of SEQ ID NO:39.

11. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 303 of SEQ ID NO:40.

12. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 311 of SEQ ID NO:41.

13. The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 305 of SEQ ID NO:42.

14. An isolated polynucleotide comprising a member selected from the group consisting of:

- (a) a polynucleotide having at least a 70% identity to a polynucleotide encoding an enzyme expressed by the DNA contained in ATCC Deposit No. _____;
- (b) a polynucleotide complementary to the polynucleotide of (a); and
- (c) a polynucleotide comprising at least 15 consecutive bases of the polynucleotide of (a) and (b).

15. A vector comprising the DNA of Claim 2.

16. A host cell comprising the vector of Claim 15.

17. A process for producing a polypeptide comprising: expressing from the host cell of Claim 16 a polypeptide encoded by said DNA.

18. A process for producing a cell comprising: transforming or transfecting the cell with the vector of Claim 15 such that the cell expresses the polypeptide encoded by the DNA contained in the vector.

19. An enzyme comprising a member selected from the group consisting of an enzyme comprising an amino acid sequence which is at least 70% identical to the amino acid sequence set forth in SEQ ID NOS:33-42.

20. A method for transferring an amino group from an amino acid to an α -keto acid comprising:

contacting an amino acid in the presence of an α -keto acid with an enzyme selected from the group consisting of an enzyme having the amino acid sequence set forth in SEQ ID NOS:33-42.

add B₁ 7
add E₃ 7